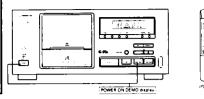


### Service Manual



ORDER NO. RRV 1 4 5 7

FILE-TYPE CD PLAYER

# PD-F505

#### THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

7	Mo	odel	Power Requirement	Remarks	
Туре	PD-F605	PD-F505	Power Requirement	nemarks	
KUXJ	0	0	AC120V		

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PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

#### 1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

#### WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

#### NOTICE

#### (FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

#### REMARQUE

#### (POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

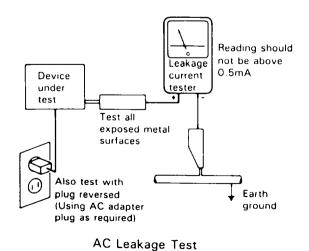
#### -(FOR USA MODEL ONLY)-

#### 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

#### **LEAKAGE CURRENT CHECK**

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

#### 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\triangle$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

#### 2. PACKING, EXPLODED VIEWS AND PARTS LIST

#### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by " " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

#### **■ CONTRAST OF PD-F605 AND PD-F505**

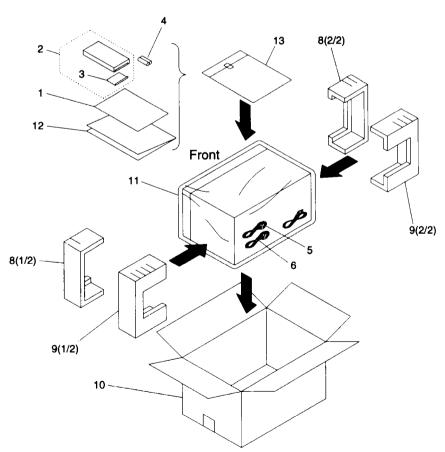
PD-F505 and PD-F605 have the same construction except for the following:

Monte		No.	No. Symbol & Description	Part	Remarks	
Mark	PD-F605			PD-F505		
		2	Remote Control	PWW1108	Not used	
ı		3	Battery Cover	AZN2249	Not used	
Į		4	Battery (R6P, AA)	AEX - 010	Not used	
١		10	Packing Case	PHG2162	PHG2156	

#### ■ PARTS LIST FOR PD-F605

Mark	No.	Description	Parts No.	<u>Mark</u>	No.	Description	Parts No.
	1	Operating Instructions (English)	PRB1234		11	Packing Sheet	AHG7010
	2	Remote Control Unit	PWW1108	NSP	12	Warranty Card	ARY1051
	3	Battery Cover	AZN2249		13	Polyethylene Bag	Z21 - 038
NSP	4	Battery (R6P, AA)	AEX - 010				
	5	Cord with Mini Plug	PDE1247				
	6	Cord with Plug	PDE1248				
	7	***************************************					
	8	Protector F	PHA1299				
	9	Protector R	PHA1300				
	10	Packing Case	PHG2162				

#### **PACKING**



#### 3. EXPLODED VIEWS AND PARTS LIST

#### **NOTES**:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by " " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

#### 3.1 EXTERIOR

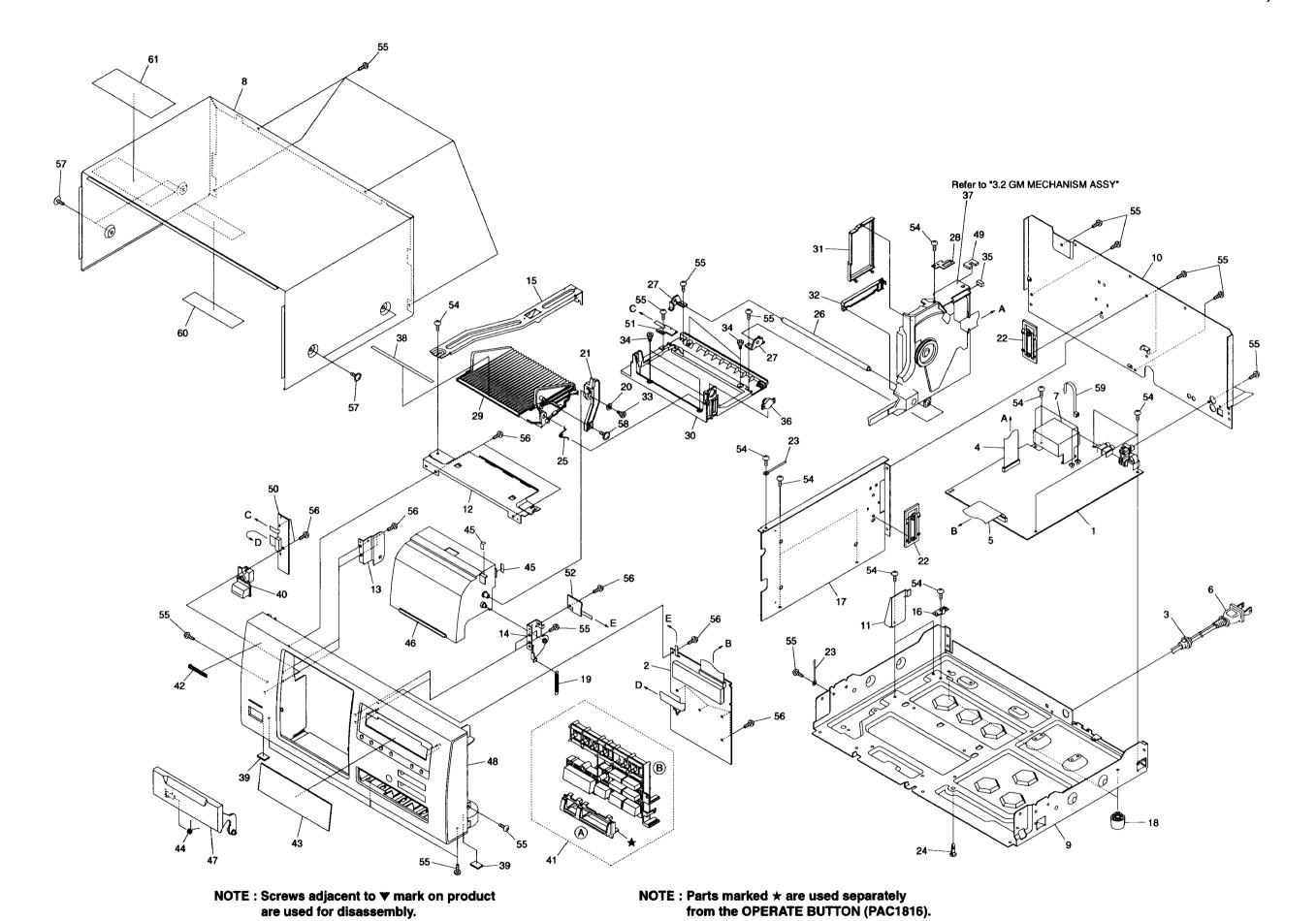
#### ■ CONTRAST OF PD-F505 AND PD-F605

PD-F505 and PD-F605 have the same construction except for the following:

A d = -l -	1	0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Part		
Mark	No.	Symbol & Description	PD-F605	PD-F505	Remarks
$\Delta$	1	Mother PCB ASSY	PWM1989	PWM1984	
	2	Function PCB ASSY	PWZ3134	PWZ3129	
	5	36P F.F.C/30V	PDD1173	Not used	
	5	32P F.F.C/30V	Not used	PDD1167	
	10	Rear Base	PNA2258	PNA2241	
	43	Display Window	PAM1702	PAM1699	
	48	Panel	PNW2649	PNW2617	
NSP	50	Power SW PCB ASSY	PWZ3145	PWZ3143	

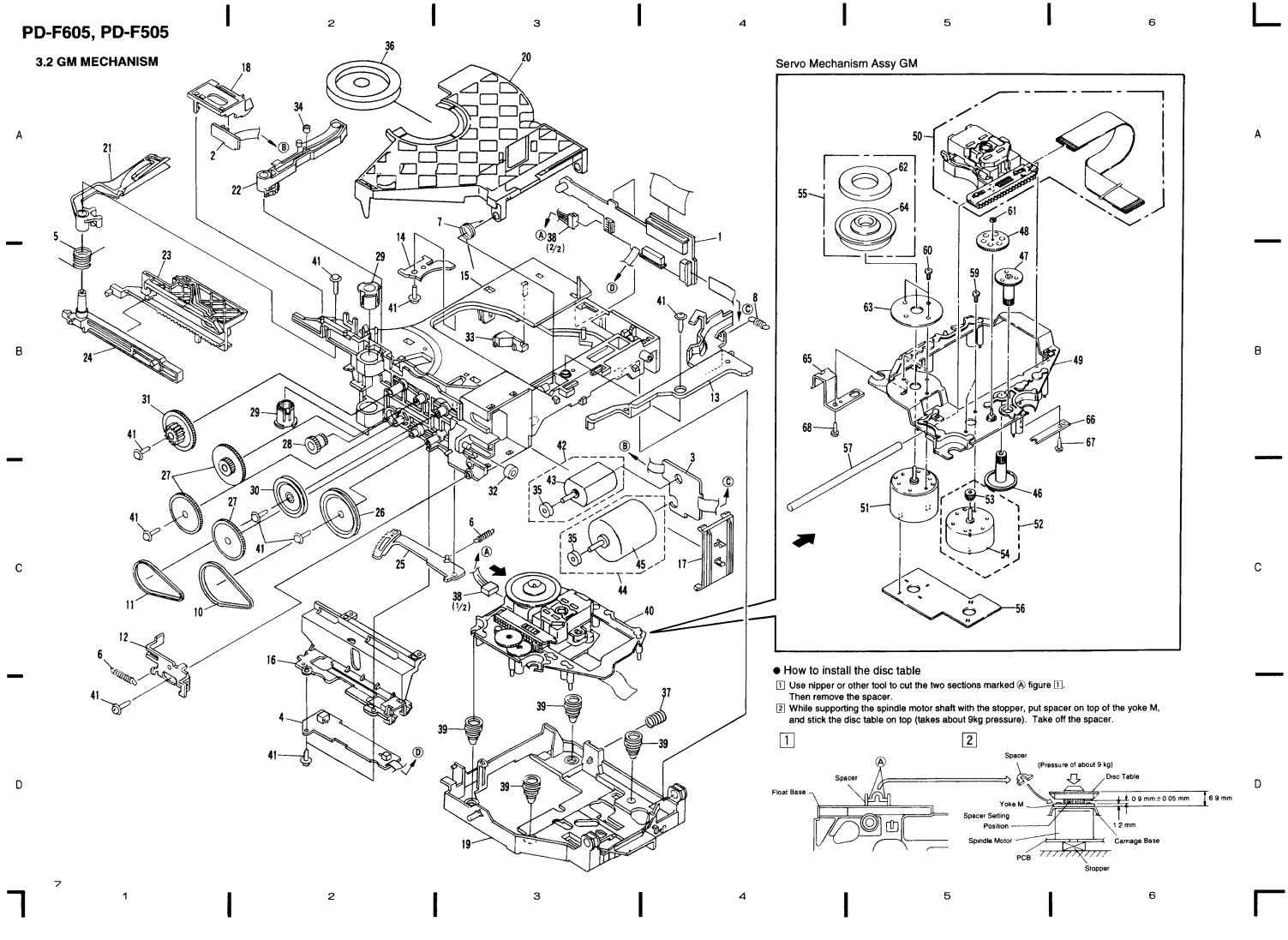
#### **■ PARTS LIST FOR PD-F605**

<u>Mark</u>	No.	Description	Parts No.	Mark	No.	Description	Parts No.
$\Delta$	1	Mother PCB ASSY	PWM1989		31	Servo Cover	ANW7073
4	2	Function PCB ASSY	PWZ3134		32	Nice Cover	ANW7074
$\Delta$	3	Cord Stopper	CM - 22C		33	Screw P	PBA1105
	4	22P F.F.C/30V	PDD1170		34	Screw C	PBA1106
	5	36P F.F.C/30V	PDD1173	NSP	35	C.H.Spacer	PEB1295
$\Delta$	6	AC Power Cord	PDG1015		36	Damper ASSY 80	PXA1584
$\Delta$	7	Power Transformer	PTT1237	NSP	37	GM Mechanism	AXA7026
	8	Bonnet	PYY1187		38	Disc Rack Panel	AAK7251
NSP	9	Under Base	PNA2249		39	Rubber Sheet	AEB1111
	10	Rear Base	PNA2258		40	Power Button	PAC1815
	11	F.B Stopper	PNB1565		41	Operate Button	PAC1816
	12	Panel Angle	PNB1545		42	Name Plate	PAM1608
	13	Hood Angle L	PNB1546		43	Display Window	PAM1702
	14	Hood Angle R	PNB1547		44	Door Spring	PBH1216
	15	Home Lock Angle 1	PNB1548	NSP	45	Cushion (ART. SVEDE)	PED1016
	16	Home Lock Angle 2	PNB1549		46	Hood	PNW2613
	17	Barrier	PNB1550		47	Door	PNW2616
	18	Foot ASSY	AEC1531		48	Panel	PNW2649
	19	Link Spring	PBH1215		49	Assist Spacer	PNM1295
	20	Link Spacer	PEB1292	NSP	50	Power SW PCB ASSY	PWZ3145
	21	Link	PNW2614	NSP	51	Home SW PCB ASSY	PWZ3149
	22	FFC Holder	PNW2615	NSP	52	Hood SW PCB ASSY	PWZ3151
	23	Cord Clamper	RNH – 184		53	***********	
NSP	24	Locking Card Spacer	VEC1596		54	Screw	BBZ30P060FMC
	25	Rack Spring	ABH7057		55	Screw	BBZ30P080FZK
	26	Guide Shaft – 25	ALA7007		56	Screw	PPZ30P080FMC
	27	Shaft Holder	ANB7021		57	Screw	FBT40P080FZK
NSP	28	Assist Angle	ANB7043		58	Screw	IBZ30P080FMC
	29	Disc Rack	ANW7069		59	Binder	ZCA – SKB90BK
	30	Rack Base S	ANW7070		60	65 Label	ORW1069
					61	Caution Lavel 25	PRW1423



В

D



#### Parts List

Mark	No.	Description	Parts No.	<u>Mark</u>	No.	Description	Parts No.
NSP	1	Mecha PCB Assy	AWZ7835		51	D.C. Motor Assy	PEA1235
NSP	2	Sensor PCB Assy	AWZ7836		52	Carriage DC Motor Assy	PEA1246
NSP	3	Motor PCB Assy	AWZ7837		53	Pinion Gear	PNW2055
NSP	4	SW PCB Assy	AWZ7838	NSP	54	Carriage DC Motor/0.3W	PXM1027
1431	5	Arm A Spring	ABH7050	1451	55	Disc Table Assy	PEA1314
	5	Allii A Spring	7 <b>. .</b> 1030		33	Disc Tuble Hisby	12/1/31
	6	Gear Plate Spring	ABH7051		56	Mechanism Board Assy	PWX1192
	7	Clamp Spring	ABH7107		57	Guide Bar	PLA1094
	8	Lock Lever Spring	ABH7106		58		
	9				59	Screw	JFZ17P025FZK
	10	Loading Belt	AEB7029		60	Screw	JFZ20P040FMC
		DI.	AEB7030		61	Washer	WT12D032D025
	11	Belt					
NSP	12	Lock Angle	ANB7027		62	Clamp Magnet	PMF1014
NSP	13	Lock Lever	ANB7038		63	Yoke M	PNB1312
NSP	14	Servo Stopper S	ANB7047	NSP	64	Disc Table	PNW2410
	15	Loading Base	ANW7051	NSP	65	Float Angle	ANB7020
	16	Cam Cover	ANW7052		66	Gear Stopper	PNB1303
	17	Motor Holder	ANW7053		67	Screw	BPZ20P060FMC
	18	Sensor Holder	ANW7054		68	Screw	BPZ26P100FMC
	19	Float Base	ANW7088		69		<i>D.</i> 220. 100e
	20	Clamper Holder	ANW7056		70	Froil	GYA1001
	20	Clamper Holder	AINW 7050		70	11011	01111001
	21	Arm (A)	ANW7057		71	Ha Narl	GEM1016
	22	Arm (B)	ANW7058				
	23	Drive Plate	ANW7059				
	24	Arm Plate	ANW7060				
	25	Gear Plate	ANW7061				
	26	Gear Pulley (B)	ANW7062				
	27	Gear A	ANW7063				
	28	Drive Gear	ANW7064				
	29	Bearing	ANW7065				
	30	Gear Pulley (A)	ANW7066				
	30	Geal Fulley (A)	ANW 7000				
	31	Select Gear	ANW7067				
	32	Roller	ANW7068				
	33	LED Lens	ANW7072				
	34	Roller B	ANW7075				
	35	Motor Pulley	PNW1634				
	26	Clamper	PNW2569				
	36	Clamper	ABH7049				
	37	Float Spring					
	38	Connector Assy (4P)	ADE7006 AEB7028				
NOD	39	Float Rubber	AXA7028				
NSP	40	Servo Mechanism Assy GM	AAA7020				
	41	Screw	IPZ20P080FMC				
	42	Motor Assy	AEA7005				
NSP	43	Motor	PXM1002				
	44	Motor Assy	AEA7006				
	45	Loading Motor	VXM1034				
		Const	DNIW2052				
	46	Gear 1	PNW2052				
	47	Gear 2	PNW2053				
	48	Gear 3	PNW2054				
	49	Carriage Base	PNW2445				
	50	Pickup Assy	AEA7004				

В

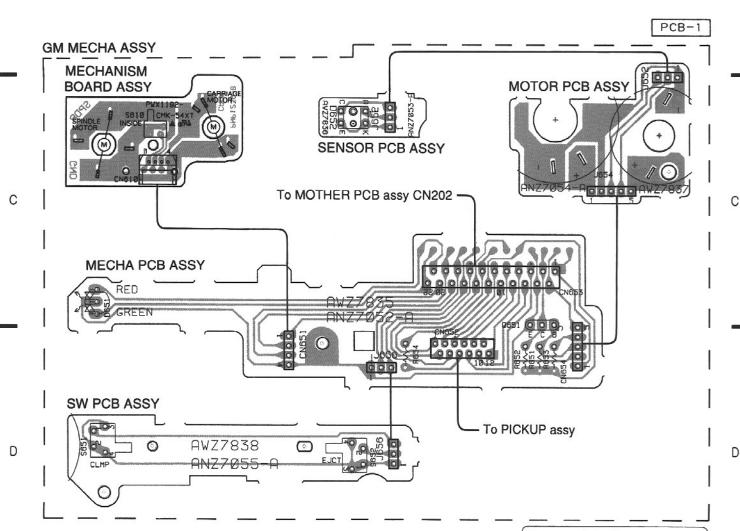
#### 4. SCHEMATIC AND PCB CONNTCTION DIAGRAMS

#### 4.1 GM MECHANISM

- NOTE FOR PCB DIAGRAMS:

  1. Part numbers in PCB diagrams match those in the schematic
- 2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
© ○ ○ B C E	B C E B C E	Transistor
●(○ ○ ○) B C E	B C E B C E	Transistor with resistor
() () () () () () () () () () () () () (	D G S D G S	Field effect transistor
<u>(00)</u> 000		Resistor array
000		3-terminal regulator



• This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations

to check with the schematic diagram.

SW PCB ASSY (AWZ7838)

<u>(660</u>

S651 S652 VSG1006 VSG1006 E JECT

J656 D2**0PWW03**15E

**-**⊚l-

PCB

MOTHER

5

ACTT+

CLMP EJCT

(A) THED SPDR

- CADR

LEDR

**⊘**LEDG

CN653 SLEM22R-2

**△**(T)

(F)57

(T)57

**△**(F)

MOTOR PCB ASSY (AWZ 7837)

R653 220 ₹

R651 R652 56K 10K

DTC124ES

(3) PHTR

R653 DCN1862 R654 DCN1865

SCH-1

- 1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".
- 2. Since these are basic circuits, some parts of them or the values of some components may be changed for improve-
- 3. RESISTORS:

Unit:  $k:k\Omega$ . M·M $\Omega$ . or  $\Omega$  unless otherwise noted. Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise

Tolerance. (F). ±1%, (G): ±2%, (K) ±10%, (M): ±20% or ±5% un-

#### 4. CAPACITORS:

Unit. p.pF or µF unless otherwise noted. Ratings' capacitor (µF)/voltage(V) unless othrewise noted. Rated voltage 50V except for electrolytic capacitors.

#### 5. COILS:

Unit: m.mH or µH unless otherwise noted

#### 6. VOLTAGE AND CURRENT:

 $\square$  or  $\leftarrow$  V

DC voltage (V) in PLAY mode unless otherwise noted  $\Leftrightarrow$  mA or  $\leftarrow$  mA.

DC current in PLAY mode unless otherwise noted. Value in ( ) is DC current in STOP mode.

#### 7. OTHERS:

- Ø or Ø Adjusting point
   Measurement of Measurement point.
- The A mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- 8. SCH- ON THE SCHEMATIC DIAGRAM:

 SCH-□ indicates the drawing number of the schematic dia gram (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position): FUNCTION PCB ASSY

S701 : MODE

S702 : CLEAR

S703 : ■ S704 : I◀◀ ◀◀

S705 : ▶► ▶► S707 : HI-LITE

S708: PROGRAM

S709 : ►/II

S710 : BEST S711 : DISC -

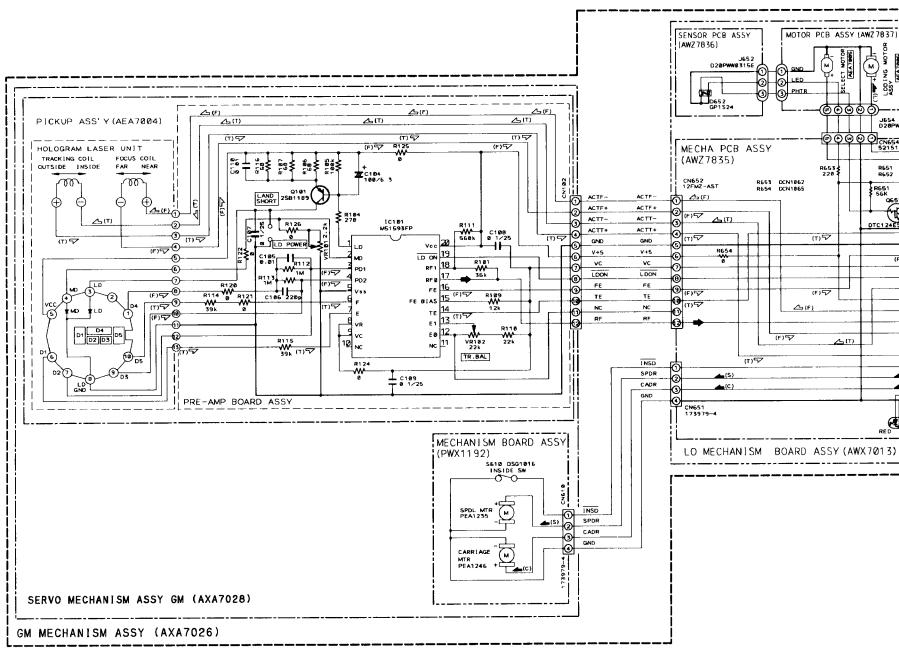
S712 . DISC +

S713 : RANDOM

S714 : REPEAT S715 : PREVIOUS

POWER SW PCB ASSY S752 : POWER STANDBY/ON

SCH-1



SIGNAL ROUTE

FOCUS SERVO LOOP LINE

TRACKING SERVO LOOP LINE

LOADING MOTOR ROUTE

SPINDLE MOTOR ROUTE CARRIAGE MOTOR ROUTE

AUDIO SIGNAL

**GM MECHANISM** 

GM MECHANISM

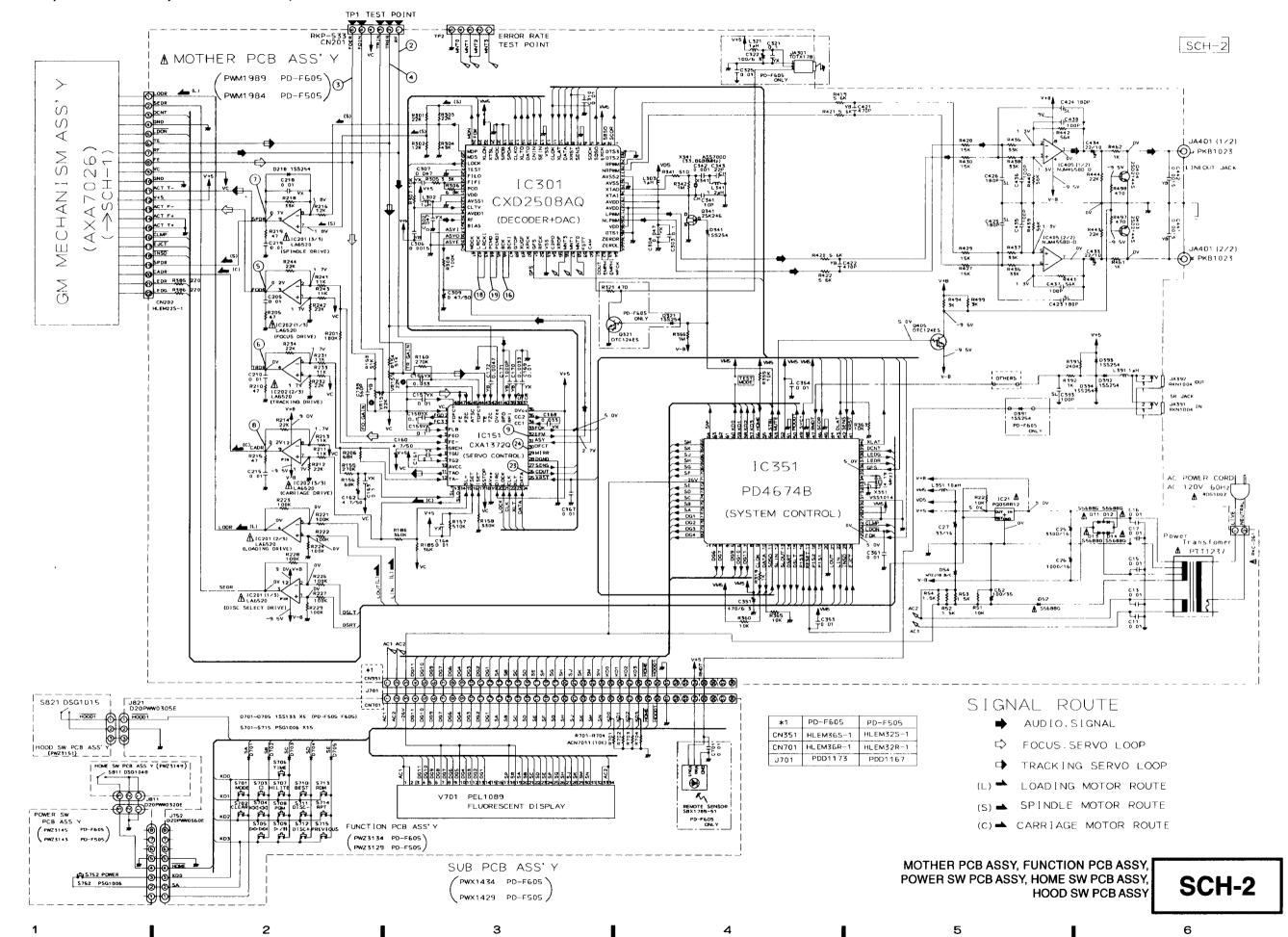
SCH-1

6

12

2

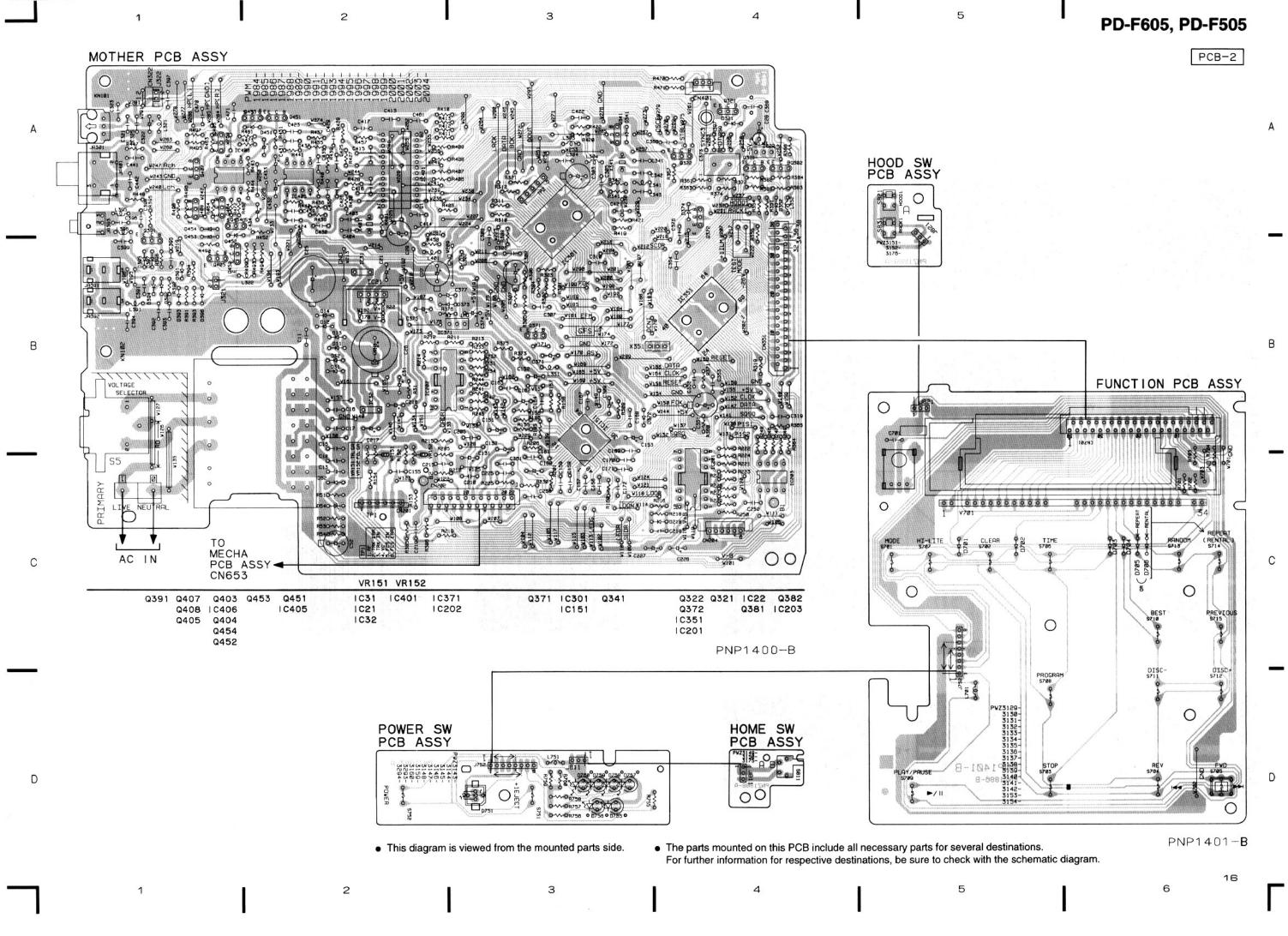
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MOTHER PCB ASSY, FUNCTION PCB ASSY, POWER SW PCB ASSY, HOME SW PCB ASSY HOOD SW PCB ASSY

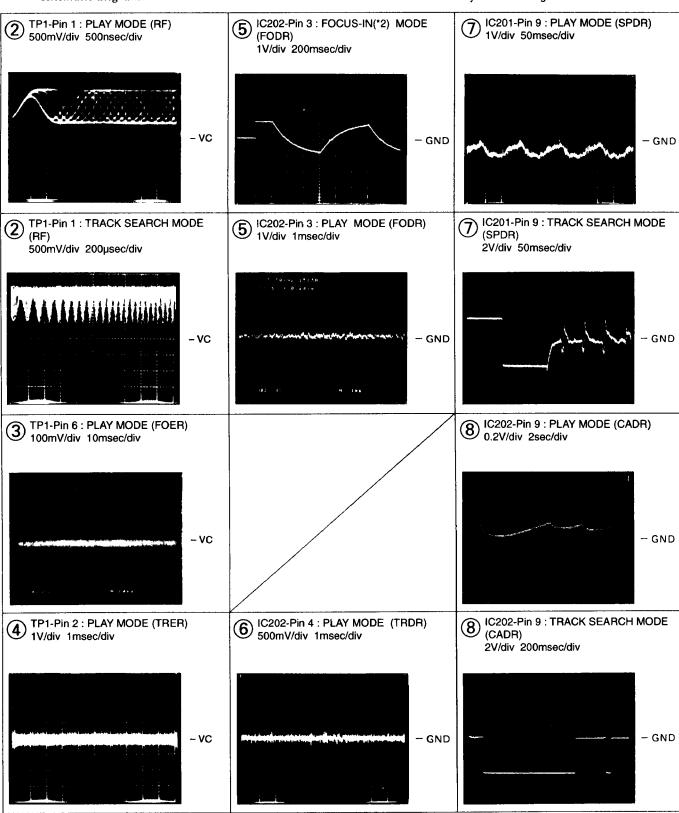


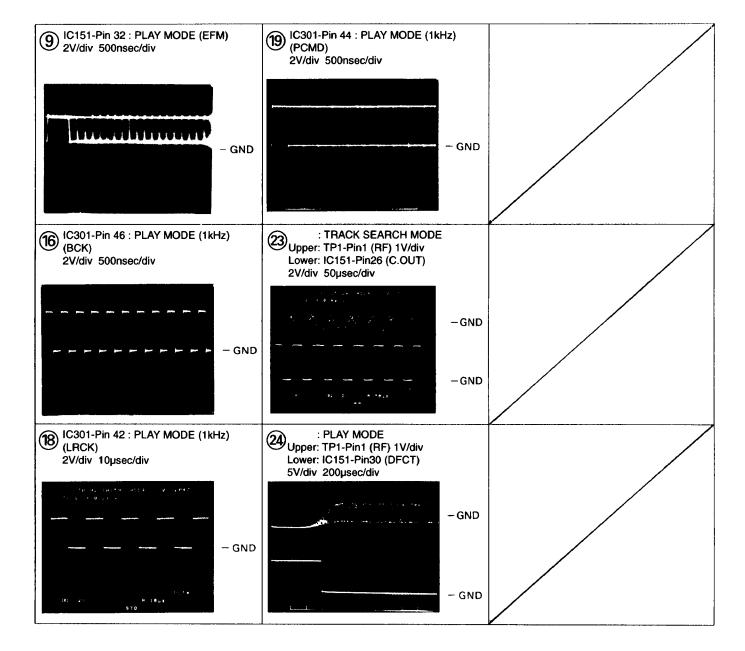
#### PD-F605, PD-F505

#### Waveforms

Note: The encircled numbers denote measuring point in the schematic disgram.

\*2 FOCUS: Press the key without loading a disc.





17

18

#### 5. PCB PARTS LIST

#### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "6" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.
  - Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

$560\Omega$	$\rightarrow$	$56 \times 10^{1} \rightarrow 561 \dots$	RD1/4PU5611J
$47k\Omega$	$\rightarrow$	$47 \times 10^{3} \rightarrow 473 \dots$	RD1/4PU473J
$0.5 \Omega$	$\rightarrow$	OR5	RN2HORSK
$l\Omega$	$\rightarrow$	1R0	RSIP I ROK

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

 $5.62k\Omega \rightarrow 562 \times 10^{1} \rightarrow 5621$  RN1/4PC [5]6[2][1] F

#### **■ LIST OF WHOLE PCB ASSEMBLIES**

14-4	Combal & Description	Part	No.	Remarks
Mark	Symbol & Description	PD-F605	PD-F505	nemans
$\Phi$	MOTHER PCB ASSY	PWM1989	PWM1984	
NSP	SUB PCB ASSY	PWX1434	PWX1429	
	FUNCTION PCB ASSY	PWZ3134	PWZ3129	
NSP	POWER SW PCB ASSY	PWZ3145	PWZ3143	
NSP	-HOME SW PCB ASSY	PWZ3149	PWZ3149	
NSP	└─ HOOD SW PCB ASSY	PWZ3151	PWZ3151	
NSP	GM MECHANISM	AXA7026	AXA7026	
NSP	LO MECHANISM BOARD ASSY	AWX7013	AWX7013	
NSP	├─MECHA PCB ASSY	AWZ7835	AWZ7835	
NSP	SENSOR PCB ASSY	AWZ7836	AWZ7836	
NSP	MOTOR PCB ASSY	AWZ7837	AWZ7837	
NSP	└─SW PCB ASSY	AWZ7838	AWZ7838	
NSP	SERVO MECHANISM ASSY	AXA7028	AXA7028	
NSP	L-MECHANISM BOARD ASSY	PWX1192	PWX1192	

#### **■ CONTRAST OF PCB ASSEMBLIES**

#### **MOTHER PCB ASSY**

PWM1984 and PWM1989 have the same construction except for the following:

Marie	Symbol &	Part No.				
Mark	Description	PWM1989	PWM1984			
	C321	CGCYX104K25	Not used			
	C322	CEAS101M6R3	Not used			
	C325	CKCYF103Z50	Not used			
	CN351	HLEM36S - 1	HLEM32S - 1			
İ	D321, D391	1SS254	Not used			
	JA301 Optical Output Jack	TOTX178	Not used			
	L321	LAU010J	Not used			
	Q321	DTC124ES	Not used			
	R321	RD1/4PU102J	Not used			

#### **FUNCTION PCB ASSY**

PWZ3129 and PWZ3134 have the same construction except for the following:

Mark	Symbol &	Part No.			
IVIAIR	Description	PWZ3134	PWZ3129		
	CN701 Remote Sensor	HLEM36R - 1 SBX1785 - 51	HLEM32R - 1 Not used		

#### **POWER SW PCB ASSY**

Although PWZ3143 and PWZ3145 are diffirent in part number, they consist of the same components.

#### PD-F605, PD-F505

#### **■ PCB PARTS LIST FOR PD-F605**

Mark	No.	Descr	iption	Parts No.	Mark	No.	Descr	iption	Parts No.
MO	rue e	PCR	ASSY			C309		ELECT. CAPACITOR	CEASR47M50
1410	, , iën	FUB	7001			C310		CERAMIC CAPACITOR	CKCYF103Z50
CELL	ICONE	оисто	DC			C321		CERAMIC CAPACITOR	CGCYX104K25
SEM	ICONL IC151		SERVO IC	CXA1372Q		C322		ELECT. CAPACITOR	CEAS101M6R3
$\mathbf{\Lambda}$			POWER OP – AMP IC	LA6520		C325		CERAMIC CAPACITOR	CKCYF103Z50
$\stackrel{lack}{\Delta}$	IC201,	, 10202	REGULATOR IC	PQ05RR12					
دنه	IC301		EFM DEMODULATION IC			C341		CERAMIC CAPACITOR	CCCCH100D50
	IC351		SYSTEM. CONTROL	PD4674B		C342		CERAMIC CAPACITOR	CKCYB102K50
	10331		5.5.Em. Common			C343		CERAMIC CAPACITOR	CCCCH220J50
	IC405		OP – AMP IC	NJM4558D – D		C351		ELECT. CAPACITOR	CEAS471M6R3
	Q321		TRANSISTOR	DTC124ES		C353,	, C354	CERAMIC CAPACITOR	CKCYF103Z50
	Q341		N – FET	2SK246					
	Q403,	Q404	TRANSISTOR	2SD2144S		C361		CERAMIC CAPACITOR	CKCYF103Z50
	Q405	•	TRANSISTOR	DTC124ES		C393		CERAMIC CAPACITOR	CCCSL101J50
	-						, C422	CERAMIC CAPACITOR	CKCYB471K50
$\Delta$	D11 -	D14	DIODE	S5688G			– C426		CCCSL181J50
	D218		DIODE	1SS254		C433.	, C434	ELECT. CAPACITOR	CEANP220M10
	D321,	D341	DIODE	1SS254					
		– D394	DIODE	1SS254			– C438	CERAMIC CAPACITOR	CCCSL101J50
$\Delta$	D52		DIODE	S5688G		C441.	, C442	CERAMIC CAPACITOR	CKCYB152K50
	D54		ZENNER DIODE	MTZJ18B	RESI				
						VR15	51, VR15	2 VR (22kΩ)	RCP1046
COIL	S AN	O FILTE	ERS					Other Resistors	RD1/4PU□□□J
	L302,	L303	AXIAL INDUCTOR	LAU010J		-n-			
	L321		AXIAL INDUCTOR	LAU010J	ОТНІ			CONTRACTOR OF	DVD 522
	L341		AXIAL INDUCTOR	LAU1R2J		CN20		CONNECTOR 6P	RKP – 533
	L351		AXIAL INDUCTOR	LAU100J		CN20		CONNECTOR 22P	HLEM22S - 1
	L391		AXIAL INDUCTOR	LAU010J		CN35		CONNECTOR 36P	HLEM36S - 1
						JA30		OPTICAL OUTPUT JACK	TOTX178
CAP	ACITO			O11 O1 THE O2 THE		JA 39	1, JA392	JACK	RKN1004
	C11, C		CERAMIC CAPACITOR	CKCYF103Z50		1 4 40	1	IACK	DKB 1022
	C15 -	C17	CERAMIC CAPACITOR	CKCYF103Z50		JA40		JACK	PKB1023 ASS7000
	C25		ELECT. CAPACITOR	CEAS332M16		X341		XTAL RES (OSC)	A337000
	C26		ELECT. CAPACITOR	CEAS102M16		X351		(33.8688MHz) CERAMIC RESONATOR	VSS1014
	C27		ELECT. CAPACITOR	CEAS330M16		AJJI		(4.19MHz)	1331014
			ELECT CAR CITION	CTC 4 01011425				(7.17WIIIZ)	
	C52		ELECT. CAPACITOR	CEAS101M35	$\Phi$			TERMINAL	RKC - 061
	C155		CERAMIC CAPACITOR	CKCYB561K50	7:7			LERIVINAL	MIC - WI
	C156		CERAMIC CAPACITOR	CGCYX103K25	FIIN	CTI	ON PO	CB ASSY	
	C157	CLEO	CERAMIC CAPACITOR	CGCYX103K25 CGCYX104K25	. •••		<b>`</b>		
	C158,	C159	CERAMIC CAPACITOR	COCIAIU4N23	SEM	ICON	DUCTO	ORS	
	CIAN		ELECT. CAPACITOR	CEAS4R7M50				DIODE	1SS133
	C160					2,01	2,03		<del>-</del>
	C161 C162		CERAMIC CAPACITOR ELECT. CAPACITOR	CGCYX104K25 CEAS4R7M50	SWIT	CHE	S AND	RELAYS	
	C162		CERAMIC CAPACITOR	CGCYX104K25				SWITCH	PSG1006
	C163		CERAMIC CAPACITOR	CGCYX104K25					-
	C104		CENTIME CHIACITOR	COCINIONES	CAP	ACITO	ORS		
	C167		CERAMIC CAPACITOR	CKCYF103Z50		C701		CERAMIC CAPACITOR	CKCYF103Z50
	C167		CERAMIC CAPACITOR	CGCYX333K25					
	C169		CERAMIC CAPACITOR	CGCYX103K25	RES	STOF	35		
	C170		CERAMIC CAPACITOR	CKCYB332K50			- R704	RESISTOR (10kΩ)	ACN7011
	C170		CERAMIC CAPACITOR	CKCYB102K50				•	
	,1			- · · -	OTH	ERS			
	C172		CERAMIC CAPACITOR	CKCYB472K50		CN7	01	CONNECTOR	HLEM36R - 1
		C210	CERAMIC CAPACITOR	CKCYF103Z50		V701		FL INDICATOR TUBE	PEL1089
	C215		CERAMIC CAPACITOR	CKCYF103Z50				REMOTE SENSOR	SBX1785 - 51
	C218		CERAMIC CAPACITOR	CGCYX103K25	_				
	C219		CERAMIC CAPACITOR	CKCYF103Z50	PO	<b>NER</b>	SW F	PCB ASSY	
	22.7								
	C302		CERAMIC CAPACITOR	CGCYX473K25	SWIT	<b>ICHE</b>	S AND	RELAYS	
	C303		AUDIO FILM CAPACITOR			S752		SWITCH	PSG1006
	C304		CERAMIC CAPACITOR	CGCYX473K25					
	C306		CERAMIC CAPACITOR	CKCYB152K50					
	C307		CERAMIC CAPACITOR	CGCYX473K25					

Mark No. Description Parts No. **HOME SW PCB ASSY SWITCHES AND RELAYS** PUSH SWITCH DSG1048 S811 **HOOD SW PCB ASSY** SWITCHES AND RELAYS S821 **PUSH SWITCH** DSG1015 **OTHERS** 3P JUMPER WIRE D20PWW0305E 1821 **MECHA PCB ASSY SEMICONDUCTORS** TRANSISTOR DTC124ES Q651 VRPG5615S LED D651 **RESISTORS** RESISTOR(56kΩ) ACN7012 R651 ACN7011 R652 RESISTOR( $10k\Omega$ ) CARBON FILM RESISTOR DCN1062 R653  $(220\Omega, 1/6W)$ R654 RESISTOR( $0\Omega$ ) DCN1065 **OTHERS** 4P CONNECTOR 173979 - 4 CN651 12FMZ - AST 12P CONNECTOR CN652 22P CONNECTOR **SLEM22R - 2** CN653 **SENSOR PCB ASSY SEMICONDUCTORS GP1S24** D652 PHOTO INTERRUPTER **OTHERS 3P JUMPER WIRE** D20PWW0315E J652 **MOTOR PCB ASSY OTHERS** LOADING MOTOR VXM1034 SW PCB ASSY **SWITCHES AND RELAYS** VSG1006 S651, S652 PUSH SWITCH **OTHERS** D20PWW0315E **3P JUMPER WIRE** J656 **MECHANISM BOARD ASSY SWITCHES AND RELAYS PUSH SWITCH DSG1016** S610

173979 - 4

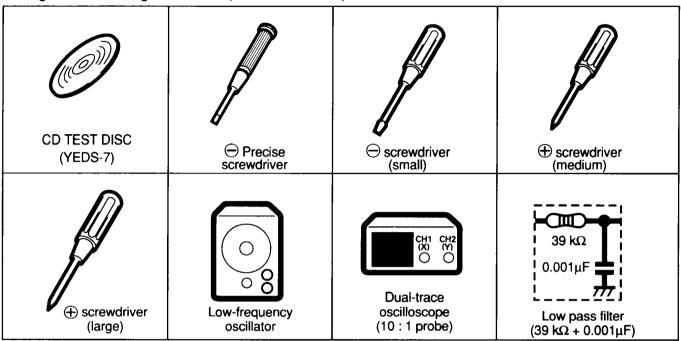
**OTHERS** 

CN610

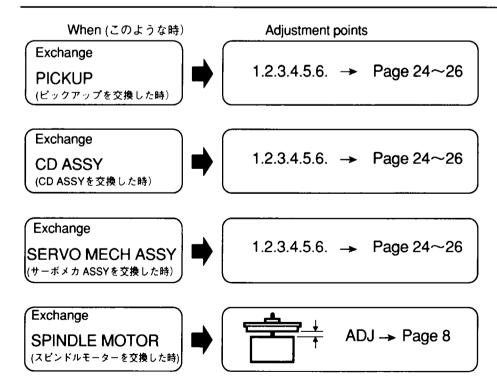
#### 6. ADJUSTMENTS (調整方法)

#### 6.1 PREPARATIONS (準備)

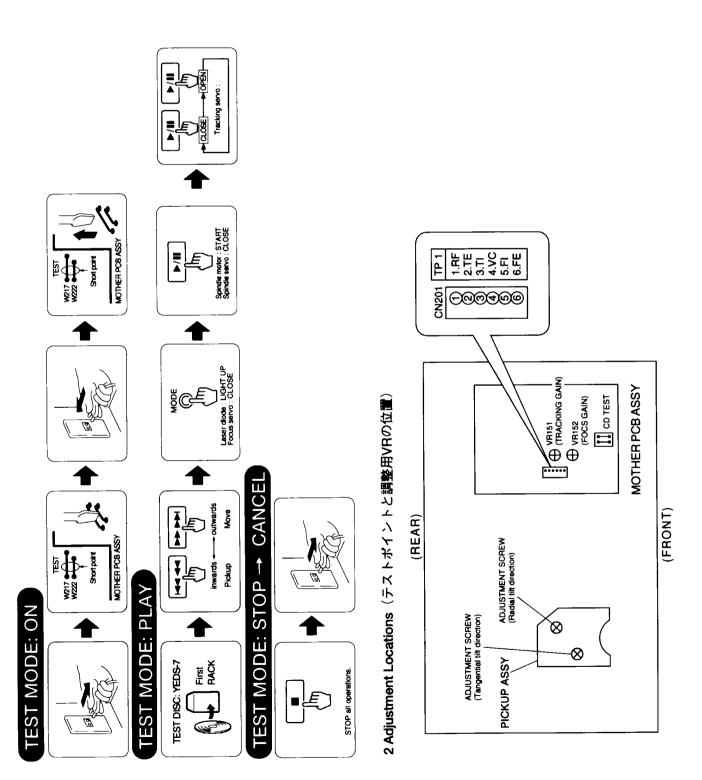
#### 1.1 Jigs and Measuring Instruments (使用測定器/治工具類)



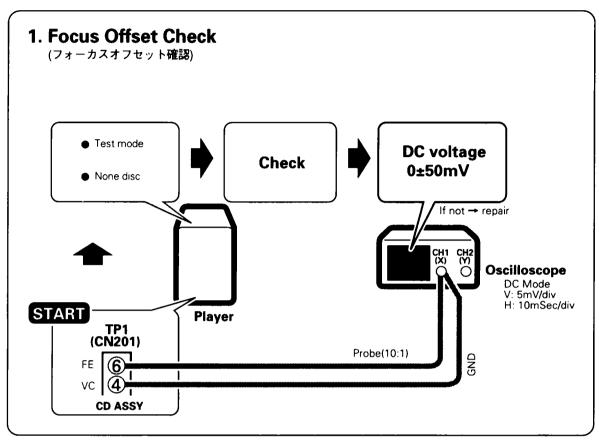
#### 1.2 Necessary Adjustment Points (調整に必要な項目)

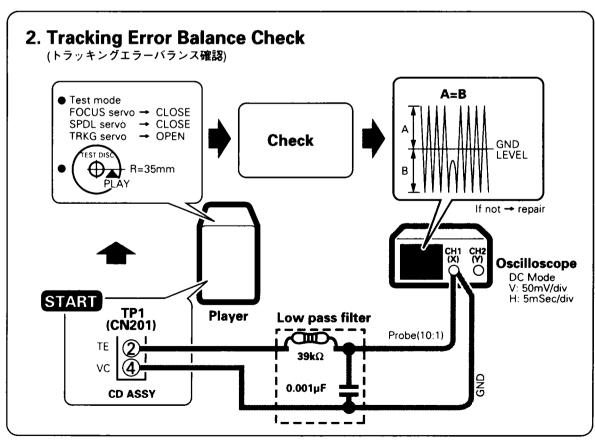


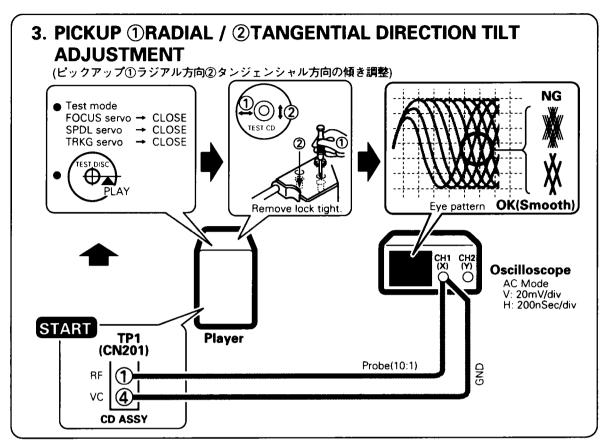
# 1 How to Start/Cancel Test Mode (テストモ-ドの設定/解除)

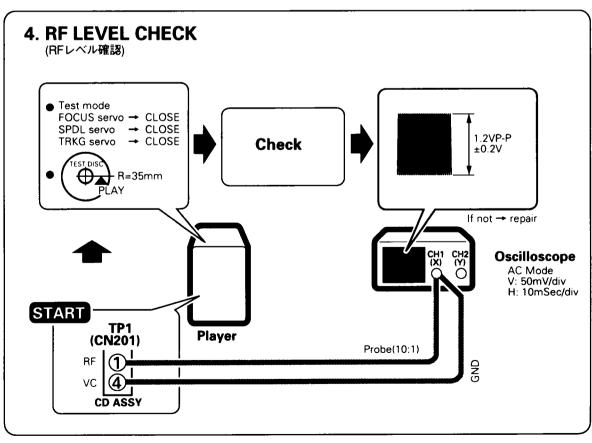


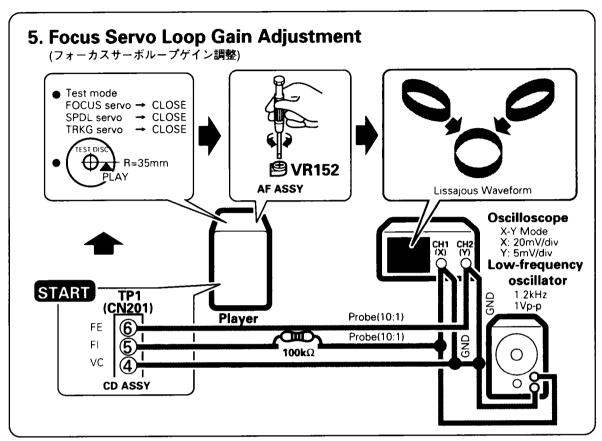
#### 6.3 Check and Adjustment (確認、調整)

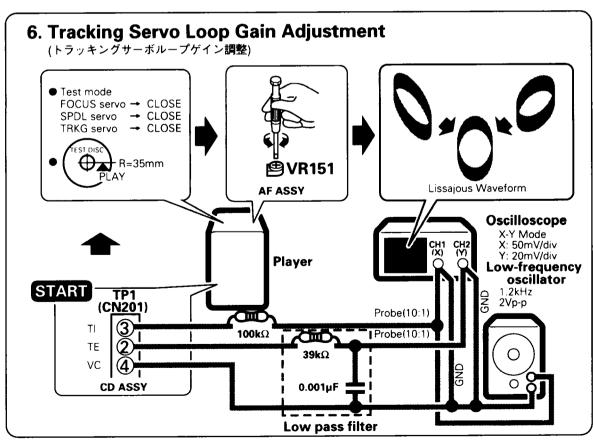










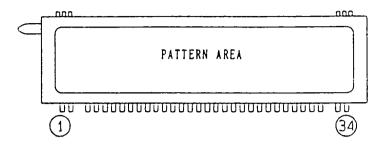


#### 7. FL INFORMATION

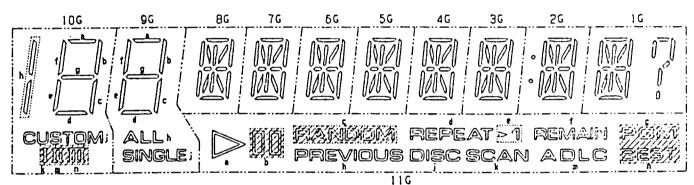
■ PEL1089 (V701 : FUNCTION PCB ASSY)

• FL TUBE

#### **PIN LOCATION**



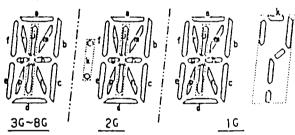
#### **GRID ASSIGNMENT**



COLOR OF ILLUMINATION

Blue-green: Unless specified segment color

Mandarin: 2//////



#### **PIN CONNECTION**

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Assignment	F	F	ΝP	116	106	96	86	7G	6G	5G	4 G	36	26	16	NL	NL	NL	р	r	a
Pin No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34						
Assignment	b	С	d	е	f	9	h	j	k	m	ח	NP	F	F						

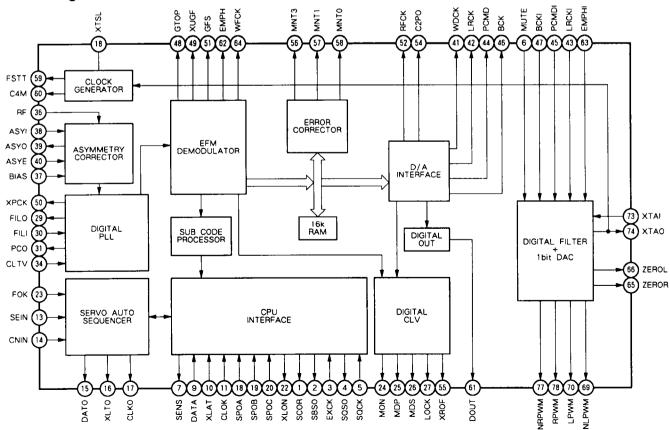
NOTE) F: Filament 1G~11G: Grid a~h, j, k, m, n, p, r: Anode NP: No Pin NL: No Lead

#### 8. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.
- **CXD2508AQ (IC301 : MOTHER PCB ASSY)**
- Digital signal processor for CD
- Pin Arrangement



#### • Block Diagram



#### • Pin Function

No.	Pin Name	1/0	Function
1	SCOR	0	H when detecting subcode sync. either S0 or S1.
2	SBSO	0	Serial output of SUBP W.
3	EXCK	1	Clock input for SBSO lead out.
4	soso	0	Serial output of SUBQ 80 bit.
5	SQCK	Τ	Clock input for SQSO lead out.
6	MUTE	Ι	Mute for H and release for L (DAC section).
7	SENS	0	SENS output to CPU.
8	XRST	-	System reset. Reset for L.
9	DATA	1	Serial data input from CPU.
10	XLAT	1	Latch input from CPU and latch the serial data at falling edge.
11	CLOK	ı	Serial data transferring clock input from CPU.
12	vss	_	GND.
13	SEIN	ī	Sens input from SSP.
14	CNIN	T	Count signal siput of track jump.
15	DATO	0	Serial data output to SSP.
16	XLTO	0	Serial data latch output to SSP and latch at falling edge.
17	CLKO	0	Serial data transferring clock output to SSP.
18	SPOA	ī	Microcomputer expansion interface. (Input A)
19	SPOB	ī	Microcomputer expansion interface. (Input B)
20	SPOC	Т	Microcomputer expansion interface. (Input C)
21	XTSL	T	Xtal selection input pin, L when Xtal is 16.9344MHz and H when Xtal is 33.8688MHz.
22	XLON	0	Microcomputer expansion interface. (Output)
23	FOK	1	Focus OK input pin. Use for SENS output and servo auto sequencer.
24	MON	0	ON/OFF control output of spindle motor.
25	MDP	0	Servo control of spindle motor.
26	MDS	0	Servo control of spindle motor.
27	LOCK	0	Sample the GFS with 460Hz. H output when GFS is H and L output when GFS is L for series of eight times.
28	TEST	ı	TEST pin. GND at normal use.
29	FILO	0	Filter output for master PLL (sleave=digital PLL).
30	FILI		Filter input for master PLL.
31	PCO	0	Charge pump output for master PLL.
32	VDD		Digital power supply for DSP.
33	AVSS1	_	Analog GND for DSP.
34	CLTV	ı	VCO control voltage input for master PLL.
35	AVDD1		Analog power supply for DSP.
36	RF	ı	EFM signal input.
37	BIAS	ı	Constant-current input of the asymmetry correction circuit.
38	ASYI	1	Comparison voltage input of the asymmetry correction circuit.
39	ASYO	0	EFM full swing output. (L=VSS, H=VDD).
40	ASYE	ı	L : Asymmetry correction OFF, H : Asymmetry correction ON.
41	WDCK	0	D/A interface for 48 bit slot and word clock (2FS) .
42	LRCK	0	D/A interface for 48 bit slot and LR clock (FS).
43.	LRCKI	ı	LR clock input to DAC (48 bit slot).

#### PD-F605, PD-F505

No.	Pin Name	I/O	Function
44	PCMD	0	D/A interface and serial data (2'SCOMP, MSB fast)
45	PCMDI	ī	Audio data input to DAC (48 bit slot).
46	вск	0	D/A interface and bit clock.
47	ВСКІ	1	Bit clock input to DAC (48 bit slot).
48	GTOP	0	GTOP output.
49	XUGF	0	XUGF output.
50	XPCK	0	XPLCK output.
51	GFS	0	GFS output.
52	RFCK	0	RFCK output.
53	VSS	-	GND.
54	C2PO	0	C2PO output.
55	XROF	0	XROF output.
56	MNT3	0	MNT3 output.
57	MNT1	0	MNT1 output.
58	MNTO	0	MNT0 output.
59	FSTT	0	2 divided 3 frequency output of pins 73 and 74.
60	C4M	0	4.2336MHz output.
61	DOUT	0	Digital Out output pin.
62	ЕМРН	0	H when emphasis of playback disc is present and L for absent.
63	ЕМРНІ	T	Deemphasis ON/OFF of DAC. (H:ON, L:OFF)
64	WFCK	0	WFCK(WRITE FRAME CLOCK) output.
65	ZEROL	0	Blank sound data detecting output. "H"(Lch) when detecting blank sound data.
66	ZEROR	0	Blank sound data detecting output. "H" (Rch) when detecting blank sound data.
67	DTS1	1	Test pin 1 for DAC. Normally L.
68	VDD	_	Digital power supply for DAC.
69	NLPWM	0	Lch PWM output. (Negative phase)
70	LPWM	0	Lch PWM output. (Positive phase)
71	AVDD2	_	Power supply for Lch PWM driver.
72	AVDD3	-	Power supply for Xtal.
73	XTAI	Ī	Xtal oscillation circuit input of 33.8688MHz
74	XTAO	0	Xtal oscillation circuit output of 33.8688MHz
75	AVSS3		GND for Xtal.
76	AVSS2	_	GND for PWM driver.
77	NRPWM	0	Rch PWM output. (Negative phase)
78	RPWM	0	Rch PWM output. (Positive phase)
79	DTS2	ı	Test pin 2 for DAC. Normally L.
80	DTS3	T	Test pin 3 for DAC. Normally L.

- •PCMD is 2'S complement output of MSB fast.
- •PCMD is 2's complement output of MSB fast.
  •GTOP is monitored the protection state of Frame sync. (H : Open the sync. protection window)
  •XUGF is frame sync. which is obtained from the EFM signal, is the negative pulse. This signal is former sync. protection.
  •XPLCK is made PLL to agree the change point of the clock inversion of EFM PLL, falling edge and EFM signal.
  •GFS signal will be H when agreeing with the frame sync. and internal insertion protection timing.
  •RFCK is 136 μ period signal which is obtained by Xtal precision.
  •C2PO is the signal which indicating the data error state.
  •XRAOF signal is generated when 16K RAM is overed the jitter margin of ± 4F

#### 9. DISASSEMBLY

#### **■ REMOVE THE FRONT PANEL**

- ① Remove the bonnet.
- 2 4 Remove the screws and parts.

Note: Remove the screw in step (4) with the hood closed.

A Remove the fixing screw in step 4 from the disc rack, then remove the hook from disc rack boss.

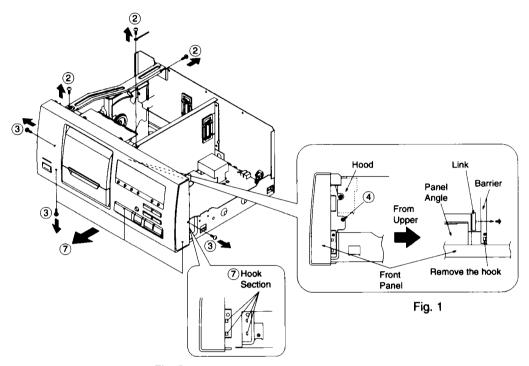
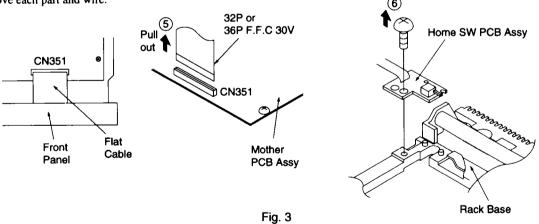


Fig. 2

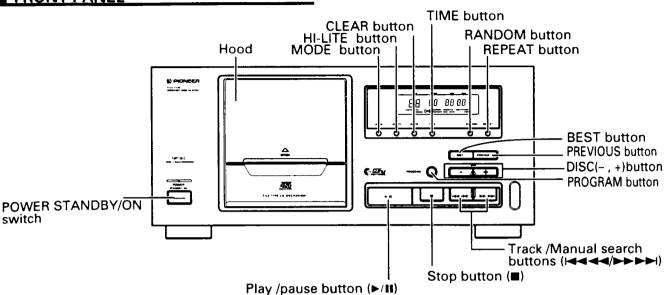
⑤ - ⑥ Remove each part and wire.



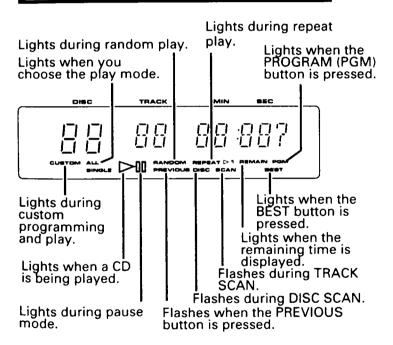
- 7 Remove the front panel.
- ① Shift the front panel slightly toward you while paying attention to the right and left hooks on the chassis. (Fig.2)

#### 10. PANEL FACILITIES

#### **■ FRONT PANEL**



#### DISPLAY



#### 11. SPECIFICATIONS

#### 1. General Type ...... Compact disc digital audio system Power requirements U.S. and Canadian models..... ..... AC 120V, 60 Hz Australian, New Zealand models ...... AC 220 -240V, 50/60 Hz Power consumption U.K.,European models ......13W Operating temperature .....+5°C - +35°C (+41°F - +95°F) Weight ( without package ) .4.8 kg (10 lb 9 oz.) External dimensions .420(W) X 316(D) X 190(H) mm (+41°F - +95°F) 16-9/16(W) X 12-7/16(D) X 7-1/2(H) in. 2. Audio section Level difference between channels ...... 1 0 dB or less (EIAJ) Output voltage $2 \pm 0.3$ Vrms (EIAJ)

Wow and flutter less than ±0.001 % (W.PEAK)

Channels 2-channel ( stereo )

( below measurable level ) (EIAJ)

#### 3. Output terminal

Audio line output
Control input/output jacks(PD-F505 and U.S., Canadian, Australian
and New Zealand models of PD-F605 only)
Optical digital output jack(PD-F605 only)

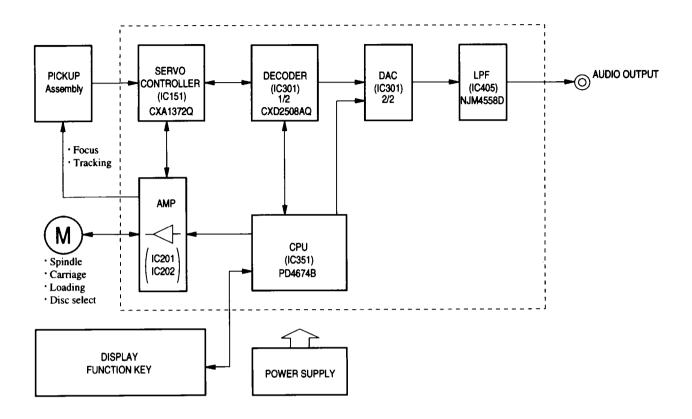
#### 4. Accessories

₹.	Accessories
•	Remote control unit (PD-F605 only)
•	Size AA/R6P dry cell batteries (PD-F605 only)
•	Output cable1
•	Control cable (PD-F505 and U.S., Canadian, Australian and New
	Zealand models of PD-F605 only ) 1
•	CD liner notes file (Except for U.S. and Canadian models) 1
•	Index label sheet (Except for U.S. and Canadian models) 1
•	Operating instructions

#### NOTE.

Specifications and design subject to possible modification without notice, due to improvements.

#### 12. BLOCK DIAGRAM



#### 1. SAFETY INFORMATION

VARO! — AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

- ADVERSEL:

USYNLIG LASERSTRÅLING VED ÅBNING

NÅR SIKKERHEDSAFBRYDERE ER UDE AF
FUNKTION UNDGÅ UDSAETTELSE FOR
STRÅLING.

- VARNING!
OSYNLIG LASERSTRÅLNING NÄR DENNA
DEL ÄR ÖPPNAD OCH SPÄRREN
ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.



LASER Kuva 1 Lasersateilyn varoitusmerkki

WARNING!

DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE



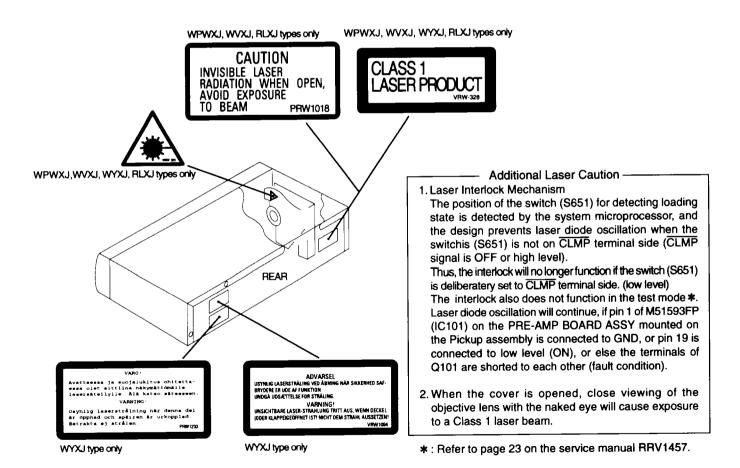
LASER
Picture 1
Warning sign for laser radiation

- IMPORTANT -

THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

---- LASER DIODE CHARACTERISTICS --MAXIMUM OUTPUT POWER: 5 mw WAVFLENGTH: 780-785 nm

#### LABEL CHECK (for WPWXJ, WVXJ, WYXJ and RLXJ types)



#### 2. CONTRAST OF MISCELLANEOUS PARTS

#### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by " " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.
   Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%)

$560\Omega$	$\rightarrow$	$56 \times 10^{1} \rightarrow 561 \dots$	RD1/4PU[56][J
$47k\Omega$	<b>→</b>	$47 \times 10^{\circ} \rightarrow 473 \dots$	RD1/4PU <b>4</b> [7[3]
$0.5 \Omega$	$\rightarrow$	OR5	RN2HORSK
10	$\rightarrow$	1R0	RSIP I ROK

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors). 5.62k $\Omega \rightarrow 562 \times 10^{\prime} \rightarrow 5621$  RN1/4PC  $\boxed{562}$  RN1/

#### ■ CONTRAST OF PD-F605/WYXJ, WVXJ, WPWXJ, RDXJ AND RLXJ TYPES

PD-F605/WYXJ, WVXJ, WPWXJ, RDXJ, RLXJ and PD-F605/KUXJ have the same construction except for the following:

				Part	No.			
Mark	Symbol & Description	PD-F605 /KUXJ	PD-F605 /WYXJ	PD-F605 /WVXJ	PD-F605 /WPWXJ	PD-F605 /RDXJ	PD-F605 /RLXJ	Remarks
$\triangle$	Mother PCB Assy	PWM1989	PWM1990	PWM1990	PWM1996	PWM1993	PWM1991	
NSP	SUB PCB Assy	PWX1434	PWX1435	PWX1435	PWX1435	PWX1435	PWX1435	i I
	-Function PCB Assy	PWZ3134	PWZ3135	PWZ3135	PWZ3135	PWZ3135	PWZ3135	
NSP	LPower SW PCB Assy	PWZ3145	PWZ3146	PWZ3146	PWZ3146	PWZ3146	PWZ3146	li
Δ	Power transformer (AC120V)	PTT1237	Not used	Not used	Not used	Not used	Not used	
Δ	Power transformer (AC220 – 240V)	Not used	PTT1236	PTT1236	PTT1236	Not used	Not used	
$\Delta$	Power transformer (AC110 – 127V/220 – 240V)	Not used	Not used	Not used	Not used	PTT1238	PTT1238	
$\Delta$	AC Power Cord	PDG1015	PDG1003	PDG1055	ADG1123	PDG1056	PDG1003	
$\overline{\Delta}$	Fuse (T5A) (For AC power cord)	Not used	Not used	PEK1003	Not used	Not used	Not used	<b>≭</b> 1. No.1
$\Delta$	Strain Relief	CM – 22C	CM – 22B	CM – 22B	CM – 22B	CM – 22B	CM – 22B	
-	Rear Base	PNA2258	PNA2261	PNA2261	PNA2287	PNA2288	PNA2289	
	Foot Assy	AEC1531	Not used	Not used	Not used	AEC1531	Not used	
	Insulator	Not used	PNW1912	PNW1912	PNW1912	Not used	PNW1912	*1. No.2
	Rubber Sheet	AEBIIII	Not used	Not used	Not used	AEBIIII	Not used	
	Control Panel	PNW2649	PNW2653	PNW2653	PNW2653	PNW2654	PNW2653	
l I	Display Window	PAM1702	PAM1714	PAM1714	PAM1702	PAM1702	PAM1702	
	LED Lens	Not used	PNW2019	PNW2019	PNW2019	PNW2019	PNW2019	*1. No.3
	Caution Label (HE)	Not used	PRW1233	Not used	Not used	Not used	Not used	<b>★</b> 1. No.4
	Caution Label (F)	Not used	VRW – 328	VRW – 328	VRW - 328	Not used	VRW - 328	*1. No.5
	Caution Label (G)	Not used	VRW - 329	VRW – 329	VRW – 329	Not used	VRW – 329	<b>≉1. No.6</b>
	Caution Label	Not used	Not used	PRW1018	PRW1018	Not used	PRW1018	<b>★1</b> . No.7
	Caution Label	Not used	VRW1094	Not used	Not used	Not used	Not used	<b>★</b> 1. No.8
	65 Label	ORW1069	Not used	Not used	Not used	Not used	Not used	
	Packing Case	PHG2162	PHG2164	PHG2190	PHG2205	PHG2191	PHG2205	
	Index Label	Not used	PRW1422	PRW1422	PRW1422	PRW1422	PRW1422	<b>★</b> 1. No.9
	Caution 220V Label	Not used	Not used	Not used	Not used	ARR1003	ARR1003	*1. No.10
	Liner Note File	Not used	PHN1051	PHN1051	PHN1051	PHN1051	PHN1051	*1. No.11
	Rear Spacer	Not used	Not used	PHC1087	Not used	Not used	Not used	<b>★</b> 1. No.12
	Operating instructions (English)	PRB1234	PRB1234	PRB1234	PRB1234	Not used	Not used	
	Operating instructions (English/Spanish/Chinese)	Not used	Not used	Not used	Not used	PRE1226	PRE1226	
	Operating instructions (French/German/Italian/Dutch /Swedish/Spanish/Portuguese)	Not used	PRD1006	Not used	Not used	Not used	Not used	
1	Cord with Mini Plug	PDE1247	Not used	Not used	PDE1247	Not used	Not used	
NSP	Warranty card	ARY 1051	ARY7009	ARY7009	PRY 1003	Not used	Not used	

Note \*1: The numbers in the remarks column correspond to the numbers on the exploded views.

#### PD-F605, PD-F505

#### ■ CONTRAST OF PD-F505/WPWXJ AND RDXJ TYPES

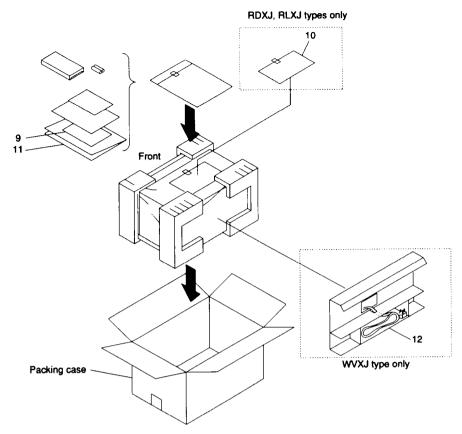
PD-F505/WPWXJ, RDXJ and PD-F505/KUXJ types have the same construction except for the following:

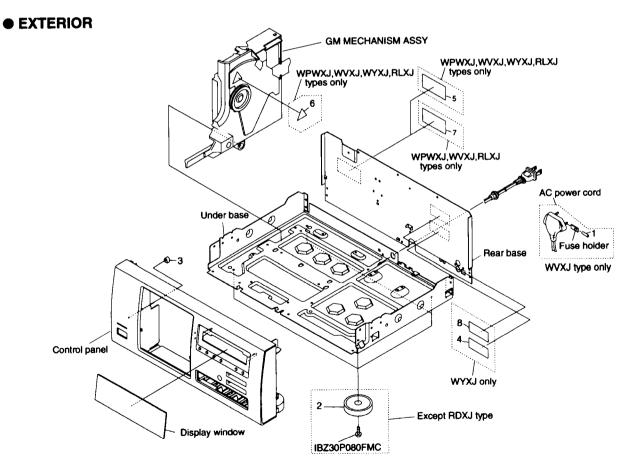
			Part No.		Remarks
Mark	Symbol & Description	PD-F505/KUXJ	PD-F505/WPWXJ	PD-F505/RDXJ	Hemans
Δ	Mother PCB Assy	PWM1984	PWM1985	PWM1988	
NSP	SUB PCB Assy	PWX1429	PWX1430	PWX1430	1
1431	-Function PCB Assy	PWZ3129	PWZ3130	PWZ3130	
NSP	Power SW PCB Assy	PWZ3143	PWZ3144	PWZ3144	
Δ	Power transformer (AC120V)	PTT1237	Not used	Not use	
Δ	Power transformer (AC220 – 240V)	Not used	PTT1236	Not used	
$\overline{\Delta}$	Power transformer	Not used	Not used	PTT1238	ı
	(AC110 – 127V/220 – 240V)				
Δ	AC Power Cord	PDG1015	ADG1123	PDG1056	
$\overline{\Delta}$	Strain Relief	CM - 22C	CM – 22B	CM – 22B	
	Rear Base	PNA2241	PNA2290	PNA2291	
	Foot Assy	AEC1531	Not used	AEC1531	
	Insulator	Not used	PNW1912	Not used	<b>★1. No.2</b>
	Rubber Sheet	AEB1111	Not used	AEB1111	
	Control Panel	PNW2617	PNW2651	PNW2652	
	32P F.F.C/30V	PDD1167	Not used	Not used	
	34P F.F.C/30V	Not used	PDD1168	PDD1168	<b>*</b> 2
	LED Lens	Not used	PNW2019	PNW2019	*1. No.3
	Caution Label (F)	Not used	VRW - 328	Not used	<b>★</b> 1. No.5
	Caution Label (G)	Not used	VRW – 329	Not used	<b>★</b> 1. No.6
	Caution Label	Not used	PRW1018	Not used	*1. No.7
	65 Label	ORW1069	Not used	Not used	ŀ
	Packing Case	PHG2156	PHG2204	PHG2192	
	Index Label	Not used	PRW1422	PRW1422	<b>★</b> 1. No.9
	Caution 220V Label	Not used	Not used	ARR1003	<b>★</b> 1. No.10
	Liner Note File	Not used	PHN1051	PHN1051	<b>★</b> 1. No.11
,	Operating instructions (English)	PRB1234	PRB1234	Not used	
	Operating instructions (English/Spanish/Chinese)	Not used	Not used	PRE1226	
NSP	Warranty Card	ARY1051	PRY1003	Not used	

Note \*1: The numbers in the remarks column correspond to the numbers on the exploded views.

<sup>\*2 :</sup> Refer to "PCB CONNECTION DIAGRAM"

#### PACKING





#### PD-F605, PD-F505

#### ■ CONTRAST OF PCB ASSEMBLIES FOR PD-F605

#### **MOTHER PCB ASSY**

PWM1990, PWM1996, PWM1993, PWM1991 and PWM1989 have the same construction except for the

				Part No.			Damadia
Mark	Symbol & Description	PWM1989	PWM1990	PWM1996	PWM1993	PWM1991	Remarks
	C132	Not used	CEAS100M16	Not used	Not used	Not used	
	C302, C304	CGCYX473K25	Not used	Not used	CGCYX473K25	Not used	
	C303	CFTYA104J50	CEAS471M6R3	CEAS471M6R3	CFTYA104J50	CEAS471M6R3	
	C310	CKCYF103Z50	Not used	Not used	CKCYF103Z50	Not used	
	C310	CCCCH100D50	Not used	Not used	CCCCH100D50	Not used	
				Numara	CKCYB102K50	Not used	
	C342	CKCYB102K50	Not used	Not used			
1	C343	CCCCH220J50	Not used	Not used	CCCCH220J50	Not used	
	C368	Not used	CKCYB102K50	CKCYB102K50	Not used	CKCYB102K50	
	C393	CCCSL101J50	Not used	CCCSL101J50	Not used	Not used	
	C403	Not used	CCCCH120J50	CCCCH120J50	Not used	CCCCH120J50	
	C404	Not used	CCCCH220J50	CCCCH220J50	Not used	CCCCH220J50	
	C413 – C416	Not used	CFTYA104J50	CFTYA104J50	Not used	CFTYA 104J50	
	C417	Not used	CGCYX104K25	CGCYX104K25	Not used	CGCYX104K25	
	C421, C422	CKCYB471K50	Not used	Not used	CKCYB471K50	Not used	
	C423 – C426	CCCSL181J50	Not used	Not used	CCCSL181J50	Not used	
	C429, C430	Not used	CCCCH390J50	CCCCH390J50	Not used	CCCCH390J50	
	C432	Not used	CEAS470M25	CEAS470M25	Not used	CEAS470M25	
	C432, C434	CEANP220M10	CEAS220M25	CEAS220M25	CEANP220M10	CEAS220M25	
	C435 - C438	CCCSL101J50	CCCCH390J50	CCCCH390J50	CCCSL101J50	CCCCH390J50	
	C441, C442 (1500pF)	CKCYB152K50	PCL1030	PCL1030	CKCYB152K50	PCL1030	
	C441, C442 (1500pr)	CRC 1B132R30	1021030				
	C461	Not used	CKCYF103Z50	CKCYF103Z50	Not used	CKCYF103Z50	
	D321, D341	1SS254	Not used	Not used	1SS254	Not used	
	D352	Not used	Not used	Not used	1\$S254	Not used	1
	D391 – D394	1SS254	Not used	1SS254	Not used	Not used	
$\Delta$	IC31	Not used	ICP – N10	ICP - N10	ICP - N10	ICP - N10	
	IC401	Not used	PD2026B(L)	PD2026B(L)	Not used	PD2026B(L)	
	JA391, JA392	RKN1004	Not used	RKN1004	Not used	Not used	
	L302, L303	LAU010J	Not used	Not used	LAU010J	Not used	
	L302, L303	LAUIR2J	Not used	Not used	LAU1R2J	Not used	
	L341 L372	Not used	LAUR47J	LAUR47J	Not used	LAUR47J	
	1.201	LAU010J	Not used	LAU010J	Not used	Not used	
	L391	Not used	DTC124ES	DTC124ES	Not used	DTC124ES	
	Q322	2SK246	Not used	Not used	2SK246	Not used	
	Q341 R310 – R312,	Not used	RD1/4PU471J	RD1/4PU471J	Not used	RD1/4PU471J	
	R310 - R312, R405 - R410	Not used	KD1/41 04/13	KD1/41 04/13	1 TOT USES	1	
		DDIABUSIN	Not word	Not used	RD1/4PU511J	Not used	
	R341	RD1/4PU511J	Not used	Not used	RD1/4PU105J	Not used	1
	R342, R366	RD1/4PU105J	Not used	Not used		RD1/4PU221J	1
	R351	Not used	RD1/4PU221J	RD1/4PU221J	RD1/4PU151J		[
	R364, R367	Not used	RD1/4PU103J	RD1/4PU103J	Not used	RD1/4PU103J Not used	
	R365	RDI/4PU103J	Not used	Not used	RDI/4PU103J	Not used	
	R391	RD1/4PU244J	Not used	RD1/4PU244J	Not used	Not used	
	R392	RD1/4PU102J	Not used	RD1/4PU102J	Not used	Not used	
	R401	Not used	RD1/4PU102J	RD1/4PU102J	Not used	RD1/4PU102J	1
	R419 – R422	RDI/4PU562J	Not used	Not used	RD1/4PU562J	Not used	
	R427 – R430	RD1/4PU153J	RD1/4PU223J	RD1/4PU223J	RDI/4PU153J	RD1/4PU223J	
	R435 – R438	RD1/4PU333J	RD1/4PU163J	RD1/4PU163J	RD1/4PU333J	RD1/4PU163J	
	R439 – R442	RD1/4PU563J	RD1/4PU433J	RD1/4PU433J	RD1/4PU563J	RD1/4PU433J	
	S5	Not used	Not used	Not used	PSB1006	PSB1006	
	X341 (4.19MHz)	ASS7000	Not used	Not used	ASS7000	Not used	
	X401 (16.9344MHz)	Not used	PSS1008	PSS1008	Not used	PSS1008	

#### **FUNCTION PCB ASSY**

Although PWZ3134 and PWZ3135 are diffirent in part number, they consist of the same components.

#### **POWER SW PCB ASSY**

PWZ3146 and PWZ3145 have the same construction except for the following:

		Par		
Mark	Symbol & Description	PWZ3145	PWZ3146	Remarks
	D751	Not used	PCX1019	

#### ■ CONTRAST OF PCB ASSEMBLIES FOR PD-F505

#### **MOTHER PCB ASSY**

PWM1985, PWM1988 and PWM1984 have the same construction except for the following:

			Part No.		Remarks
Mark	Symbol & Description	PWM1984	PWM1985	PWM1988	Hemarks
	C302, C304	CGCYX473K25	Not used	CGCYX473K25	
	C303	CFTYA104J50	CEAS471M6R3	CFTYA 104J50	
	C310	CKCYFI03Z50	Not used	CKCYX103Z50	
	C341	CCCCH100D50	Not used	CCCCH100D50	
	C342	CKCYB102K50	Not used	CKCYB102K50	
	C342	CKC1D102K30	1100 used	CKC I DIOZKSO	
	C343	CCCCH220J50	Not used	CCCCH220J50	
	C368	Not used	CKCYB102K50	Not used	
	C403	Not used	CCCCH120J50	Not used	
	C404	Not used	CCCCH220J50	Not used	
	C413 – C416	Not used	CFTYA 104J50	Not used	
	C417	Not used	CGCYX104K25	Not used	
	C417 C421, C422	CKCYB471K50	Not used	CKCYB471K50	
	1	CCCSL181J50	Not used	CCCSL181J50	
	C423 – C426	Not used	CCCCH390J50	Not used	
	C429, C430	I .	CEAS470M25	Not used	
	C432	Not used	CEAS4/0M25	Not used	
	C433, C434	CEANP220M10	CEAS220M25	CEANP220M10	
	C435, C434 C435 – C438	CCCSL101J50	CCCCH390J50	CCCSL101J50	
	C441, C442 (1500pF)	CKCYB152K50	PCL1030	CKCYB152K50	
		Not used	CKCYF103Z50	Not used	
	C461	HLEM32S - 1	HLEM34S - 1	HLEM34S - 1	
	CN351	HLEMI325 - 1	HLENIS43 - I	HEEMS43 - 1	
	D341	1SS254	Not used	1SS254	
	D352	Not used	Not used	1SS254	
$\Delta$	IC31	Not used	ICP – N10	ICP - N10	
	IC401	Not used	PD2026B(L)	Not used	
	L302, L303	LAU010J	Not used	LAU010J	
	L341	LAU1R2J	Not used	LAU1R2J	
		Not used	LAUR47J	Not used	
	L372	Not used	DTC124ES	Not used	
	Q322	2SK246	Not used	2SK246	
	Q341 R310 - R312, R405 - R410	Not used	RD1/4PU471J	Not used	
	K510 K512, K405 K710	1.55. 2.22			
	R341	RD1/4PU511J	Not used	RD1/4PU511J	
	R342, R366	RD1/4PU105J	Not used	RD1/4PU105J	
	R351	Not used	RD1/4PU221J	RD1/4PU151J	
	R364, R367	Not used	RD1/4PU103J	Not used	
	R365	RD1/4PU103J	Not used	RD1/4PU103J	
	R401	Not used	RD1/4PU102J	Not used	
		RD1/4PU562J	Not used	RD1/4PU562J	
	R419 – R422	RD1/4PU362J RD1/4PU153J	RD1/4PU223J	RD1/4PU153J	
	R427 – R430		RD1/4PU163J	RD1/4PU333J	
	R435 – R438	RD1/4PU333J		RD1/4PU563J	1
	R439 – R442	RD1/4PU563J	RD1/4PU433J	KD1/4FU303J	
	S5	Not used	Not used	PSB1006	
	X341 (4.19MHz)	ASS7000	Not used	ASS7000	
	X401 (16.9344MHz)	Not used	PSS1008	Not used	I

#### PD-F605, PD-F505

#### **FUNCTION PCB ASSY**

PWZ3130 and PWZ3129 have the same construction except for the following:

	0 1 10 0	Pari		
Mark	Symbol & Description	PWZ3129	PWZ3130	Remarks
	CN701	HLEM32R - 1	HLEM34R - i	

#### **POWER SW PCB ASSY**

PWZ3144 and PWZ3143 have the same construction except for the following:

Mark		Part No.		
	Symbol & Description	PWZ3143	PWZ3144	Remarks
	D751	Not used	PCX1019	

The numbers marked with a circle show the number of each measuring point, which correspond to the number in the service manual PD-F605 (ORDER NO. RRV1457) on page 13.

▲ MOTHER PCB ASSY C3221 L JA301 C3221 L JA301 C00/6 33 Tyx RLXJ, WPWXJ, WYXJ Prats #A and #B indicated in (PWM1990 PD-F605/WYXJ.WVXJ) #1 HB HB #427-#450 22K 15K R435-#436 16K 33K R439-#442 43K 56K C435. C434 22/25 22/10 (MP) C435-C438 CH 39P SL 100P C441 C442 PCL1030 VB 1500P (PWM1996 PD-F605/WPWXJ) 233 WXJ Types Only the circuitry diagram change GM MECHA (AXA7026) SIGNAL ROUTE depending on existence of the (PWM1993 PD-F605/RDXJ) ( ➡ SCH-1) (PWM1991 PD~F605/RLXJ) (PWM1985 PD-F505/WPWXJ) RDXJ Type Only DAC IC(IC401), which differs AUDIO SIGNAL (1C301) according to destinations PD-F605 Only LOADING DRIVE
SPINDLE DRIVE (PWM1 988 PD-F505/RDXJ) JA401 (1/2) LODR (55 (3) ➡ FOCUS SERVO LOOP <del>† **■)(**O)</del>∟ PKB1023 SEDR (AWX7013) TRACKING SERVO LOOP

CARRIAGE SERVO LOOP 3 DCNT INEOUT JACK GND SW PCB ASSY (S) LDON WYXJ Only (AWZ7838) #8 #A #8 C303 CEAS471M6R3 CFTYA104J50 R302\$ \$R304 ⑦ RF → MOTOR PCB ASSY (AWZ 7837) VD5 C342 C343 R341 510 0.001 22P R341 510 0.001 22P X341 510 0.001 22P X341 510 0.001 22P o vc SENSOR PCB ASSY (AWZ7836) C485 St W GND\_ 4303¢ HOME SW PCB ASSY (2) V+5 (PWZ3149) ACT F-INSIDE SW S610 DSG1016 SPINDLE MOTOR ACT F+ 1 1 8V 1 1 8V 1 1 8V 1 1 8V 1 2 1 1 8V 1 2 1 1 8V ACT T+ CLMP # DTS1 RESPONSE TO SECURITY OF S PEA1235 CN610 O EJCT 173979-4 (M) (2/22) (B) (2/22) R420 5 6K YB C423 #B INSO POWER SW PCB ASSY #B SPDR PWZ3146 PD-F605/WYXJ,WVXJ, S 0.2V 2 R241 11K 2 1205 1 17V R242 1 R205 2 2 K CADR CADR WPWXJ, RDXJ, RLXJ) D LEDR R385

LEDG 220

R586
220 (PWZ3144 PD-F505/WPWXJ,RDXJ) + 1 CN202 ILEM22S-1 PD-F605 On (FOCUS DRIVE) R201 HOOD SW PCB ASSY #12 D321 #A SHORT #B 155254 R234 22K (PWZ3151) R233 C2101 OV R233 C2101 OV R233 R2102 (2/3) VC (RACKIND DRIVE) S821 DSG1015 RESISTORS 1/4W Type W W 2003 R160 270K Rating identified where used PICKUP ASSY CAPACITORS (1) M Mylar COMA or CFTYA or Film C157YX 0.01 (2) YB Ceramic CKCYB (3) CH Ceramic CCCCH (4) YX Ceramic CGCYX ▲ PD--F605/ WPWXJ Only (5) SL Ceramic CCCSL FO.GAIN (6) PU Ceramic CKPUYF
(7) Unmarked type CKCYF (Axial) \*D393 155254 ▲ ASSY GM (AXA7028) R392 D394 155754 TC5915254 TC5915254 TC5915254 TC59155254 TC591552 EXCEPT PD~F605/WPWXJ! IC351 INDUCTORS R206 ---{-<u>----</u>-(1) Unmarked type Axial LAU SR JACK PD4674B OTHERS CHASSIS GROUND CAUTION FOR CONTINUED PROTECTION ABC LOW ACTIVE SIGNAL AGAINST RISK OF FIRE REPLACE WITH SAME TYPE NO ICP-N10, MFD BY ROHM CO , LTD, FOR IC31 (SYSTEM CONTROL) A (C201 (2/3) 100k LA6520 (LOADING DRIVE) 0V R224 100k R228 100k FUNCTION PCB ASSY S701 S703 S707 S710 S713 MODE | HILLITE BEST RDM MODE | HILLITE BEST RDM | HILLITE BEST R (PWZ3135 PD-F605/WYXJ, WVXJ, WPWXJ, RDXJ, RLXJ) WYXJ, WPWXJ MODEL RDXJ, RLXJ MODEL (PWZ3130 PD-F505/WPWXJ,RDXJ) WVXJ. MODĒL ROXJ RLXJ AC110-127V/220-240V V+B---WVXJ AC220-240V 50/60H WPWX J WYXJ AC220 240V 50/60H 9 0V V+B R226 100K 12 2 100K 12 AC POWER CORD PD-F605 Only R186 360K MRDXJ PDG1056 SBX1785-51 REMOTE SENSOR VD5 ICP-N10 FLUORESCENT DISPLAY \$5688G \$5688G C16 \$\lambda\$ D11 D12 \$\lambda\$ 0 01 \$\lambda\$ \$\lambda\$ D13 D14 \$\lambda\$ 0 01 \$\lambda\$ \$5688G \$5688G \$14 ARLXJ PDG1003 **~** V+5-V701 PEL1089~ MYXJ PDG1003 |2 |3 |4 |5 |6 |7 |8 |9 |१वा ।। । द्वार द्वार साम्रासी जा साम् A365 J R360 R54 R53 1 5K R52 R51 1 5K 10I ₩PWXJ WYXJ PTT1236 **★** PTT1238 PDD1173- PD-F605 PDD1168- PD-F505 HLEM36S-1 PD-F605 HLEM34S-1 PD-F505/WPWXJ, RDXJ HLEM34R-1 PD-F505/WPWXJ, RDXJ)

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В



# Service Manual

ORDER NO. **RRV 1604** 

FILE-TYPE CD PLAYER

## **-605** PD-F505

● Refer to the service manual RRV1457 for PD-F605/KUXJ.

#### THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Туре	Model		Power Requirement	The voltage can be converted by the
	PD-F605 PD-F505			following method.
WPWXJ	0	0	AC220 - 240V	
WYXJ	0	×	AC220 – 240V	
WVXJ	0	×	AC220 – 240V	
RDXJ	0	0	AC110 - 127V/220 - 240V	With the voltage selector
RLXJ	0	×	AC110 - 120V/220 - 240V	With the voltage selector

#### **CONTENTS**

1.	SAFETY INFORMATION	2
2.	CONTRAST OF MISCELLANEOUS PARTS	3

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